



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/522,359

03/09/2000

Wadood Hamad

A-6756

3106

1726 7590 11/26/2008
INTERNATIONAL PAPER COMPANY
6285 TRI-RIDGE BOULEVARD
LOVELAND, OH 45140

EXAMINER

FERGUSON, LAWRENCE D

ART UNIT

PAPER NUMBER

1794

MAIL DATE

DELIVERY MODE

11/26/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/522,359	Applicant(s) HAMAD ET AL.	
	Examiner LAWRENCE D. FERGUSON	Art Unit 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 July 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 6, 8, 18, 20-27, 29 and 31-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6, 8, 18, 20-27, 29 and 31-43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This action is in response to the amendment filed July 28, 2008.
Claims 1, 18 and 25 were amended rendering claims 1-3, 6, 8, 18, 20-27, 29 and 31-43 pending in this case.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections – 35 USC 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-3, 6, 8, 18, 20-27, 29 and 31-43 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1, 18 and 25, the phrase “a crack-resistant printing paper or board comprising a cellulose fiber network web; and a polymer material impregnated into the web in thin discontinuous geometrical formations to form a uniform paper or board surface” is indefinite. It is unclear how the impregnated fiber network web can be uniform. At best, page 3, lines 10-14 of the instant specification states the paper or board can be printed upon after it is coated. It is unclear how Applicant claims a uniform impregnated printing paper or board without the fibrous web (paper or board) being coated, as in instant claim 8.

Claim Rejections – 35 USC § 103(a)

5. Claims 1-3, 6, 8, 18, 20-27, 29 and 31-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Li et al (U.S. 5,061,545) in view of Lindemann et al (U.S. 3,404,112).

Li discloses a composite comprising a fibrous web which is impregnated with a polymeric composition in a regular or random pattern (column 2, lines 6-20). The composite comprises 1 to 15% of the polymeric composition (column 2, lines 22-25). The reference discloses heating the coated fibers and causing the material to flow and occupy void spaces to produce a continuous (uniform) structure (column 10, lines 59-64) where the composite materials may be constructed and arranged in a variety of forms (column 10, lines 39-40). Concerning claims 1 and 25, although Li does not specifically disclose the polymer material is thin, Li discloses the amount of impregnated polymeric material can vary based upon the thickness of the fibrous web (column 9, lines 26-29). Because Li discloses the web can be 0.002 inches thick (column 12, lines 20-22) it is reasonable to one of ordinary skill in the art to conclude that the impregnated polymeric material is thin, since the fibrous web is thin. Concerning claims 2, 6, 18, 20, 26, 29, 32, Li discloses the polymer material is thermoplastic and can include polyester or styrene butadiene (column 7, lines 12-34, 56-62). Patterned rolls are used to impregnate the composition, with geometrical formations such as rectangular stripes, equidistant circles and diamond-shaped formations (column 2, lines

Art Unit: 1794

33-47 and Figures 3-8) as in claims 3, 22-24, 27 and 34-36. Concerning claims 8, 31 and 39, at least one continuous polymeric layer can be coated on the surface of the fibrous web (column 9, lines 30-35). Li does not explicitly disclose the fibrous web composite is a printing paper or board that can be calendered and printed, as in claims 21, 33, 37-38 and 40-43.

Lindemann teaches a composition comprising a coated fibrous web, such as paper or paperboard, where the composition can be calendered and printed and the coating material comprises 5 to 40% of a polymer (column 1, lines 15-25, 51-52) where is expected for the coated polymeric material to impregnate the conventionally permeable fibrous web of the paper or paperboard. Li and Lindemann are combinable because they are related to a similar technical field, which are coated fibrous web materials impregnated with polymer. Lindemann teaches fibrous web are known to be paper or paperboard and are conventionally calendered and printed, where calendering the composition improves the finish of the coated material (column 1, lines 45-50) and printing the coated material improves the marketability of the coated material.

Regarding claims 21, 33 and 43, as indicated by Applicant's in the remarks section I, on page 6, fibrous paper is known to comprise pulp fibers.

Response to Arguments

6. Applicant's arguments of the rejection made under 35 U.S.C. 103(a) as being unpatentable over Li et al (U.S. 5,061,545) in view of Lindemann et al (U.S. 3,404,112) have been considered but are unpersuasive. Applicant argues Li does not disclose the

Art Unit: 1794

impregnated fibrous material is formed into a uniform paper or board surface. Li discloses a composite comprising a fibrous web which is impregnated with a polymeric composition in a regular or random pattern (column 2, lines 6-20). The reference discloses heating the coated fibers and causing the material to flow and occupy void spaces to produce a continuous (uniform) structure (column 10, lines 59-64) where the composite materials may be constructed and arranged in a variety of forms (column 10, lines 39-40). Applicant further argues there is no evidence of impregnation disclosed by Lindermann. Lindemann teaches a composition comprising a coated fibrous web, such as paper or paperboard, where the composition can be calendered and printed and the coating material comprises 5 to 40% of a polymer (column 1, lines 15-25, 51-52) where is expected for the coated polymeric material to impregnate the conventionally permeable fibrous web of the paper or paperboard.

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 1794

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence Ferguson whose telephone number is 571-272-1522. The examiner can normally be reached on Monday through Friday 9:00 AM – 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks, can be reached on 571-272-1401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Lawrence Ferguson/
Patent Examiner, Art Unit 1794

/KEITH D. HENDRICKS/

Supervisory Patent Examiner, Art Unit 1794